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09/417,527	10/13/1999	DAVID M. POTZOLU	2207/6926	7553

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EXAMINER

BURGESS, BARBARA N

ART UNIT

PAPER NUMBER

2157

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12

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/417,527

Applicant(s)

POTZOLU, DAVID M.

Examiner

Barbara N Burgess

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on 22 May 2003.

2a) ☐ This action is **FINAL**.

2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) 1-9 and 11-25 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) _____ is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) ☐ All b) ☐ Some * c) ☐ None of:

1. ☐ Certified copies of the priority documents have been received.

2. ☐ Certified copies of the priority documents have been received in Application No. _____.

3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.

4) ☒ Interview Summary (PTO-413) Paper No(s). 12.

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other:

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DETAILED ACTION

This office action is in response to Request for Continuation Examination filed on May 22, 2003. Claims 1-9, 11-22 are pending for further examination. At the applicant's request, claim 10 has been cancelled. Claims 23-25 are presented for initial examination.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 4-5, 7, 9, 13, 15, 17, 21, and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamamoto et al. (hereinafter "Yama", 6,282,563 B1) in view of Li et al. (hereinafter "Li", 6,119,165).

As per claims 1, 9, and 21, Yama discloses a method for providing functionality on a network, the network comprising the nodes, the method comprising:

- Moving an agent from a first device to a target device (column 1, lines 16-21, column 3, lines 15-17, column 4, lines 15-25, column 5, lines 20-23);

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- Re-routing relevant traffic to the target device (column 3, lines 2-7, 15-17, 51-56, column 4, lines 7-13, 42-57, column 5, lines 1-5, 25-28, 43-55, column 6, lines 1-4, 8-10, 17-22, 26-28, column 8, lines 15-21, 49-53, 58-59, column 12, lines 27-41);
- A route device residing on one node of the network, the route device configured to divert to the mobile agent traffic relevant to the mobile agent (column 3, lines 2-7, 15-17, 51-56, column 4, lines 7-13, 42-57, column 5, lines 1-5, 25-28, 43-55, column 6, lines 1-4, 8-10, 17-22, 26-28, column 8, lines 15-21, 49-53, 58-59, column 12, lines 27-41).

Yama does not explicitly disclose:

- Performing application layer gateway functionality by the agent at the target device.

However, the use and advantages for an agent performing application layer gateway functionality is well known to one skilled in the relevant art at the time the invention was made as evidenced by the teachings of Li (column 1, lines 35-39, Abstract).

Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to implement or incorporate an agent performing application layer gateway functionality in Yama's method in order to filter out material received at the client that may be in violation of security policy.

As per claims 4, 13, and 20, Yama does not explicitly disclose where the agent acts as a firewall. However, the use and advantages for an agent acting as a firewall is

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well known to one skilled in the relevant art at the time the invention was made as evidenced by the teachings of Li (column 1, lines 30-33, column 2, lines 20-23).

Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to implement or incorporate an agent acting as a firewall in order to filter out material received at the client that may be in violation of security policy.

As per claims 5, 17, and 22, Yama does not explicitly disclose the agent:

- Accepts traffic (data stream) sent to the target device addressed to a client device;
- Performing at least one of filtering (function) the traffic (data stream) or modifying (function) the traffic (data stream);
- Sends the traffic (data stream) to the client device.

However, the use and advantages for the agent filtering the traffic before sending to the client is well known to one skilled in the relevant art at the time the invention was made as evidenced by the teachings of Li.

Li discloses an agent monitoring and filtering the network for users attempting to view prohibited material from a website or violating security policies. If such actions occur, the agent may terminate the session or filter out specific traffic before sending to the client (column 2, lines 20-32, column 5, lines 39-41, 49-56). Therefore, Li implicitly discloses the agent accepting traffic sent to the target device addressed to a client device, performing at least one of filtering the traffic or modifying the traffic, and sending the traffic to the client device.

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Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to implement or incorporate an agent filtering the traffic before sending to the client in Yama's method to ensure that prohibited materials are not being passed to the client and increase security so that only specified users have access to certain information.

As per claim 7 and 15, Yama does not explicitly disclose the agent, before performing application layer gateway functionality, installing a software module to aid in performing such functionality. However, the use and advantages for installing a software module is well known to one skilled in the relevant art at the time the invention was made as evidenced by the teachings of Li (column 1, lines 33-35, 44-45, 48-50, 61-63, 65-67).

Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to implement or incorporate installing a software module in Yama's method in order to perform functions on the client and communicate with the agent bi-directional with information being transferred both ways.

As per claim 23, Yama discloses:

- A first network node including a first proactive environment capable of at least one of creating, executing, controlling, and receiving a mobile agent (column 3, lines 15-17, 45-48, 57-60);

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- A second network node coupled to the first network node and including a second proactive environment capable of at least one of creating, executing, controlling, and receiving a mobile agent (column 3, lines 25-28, 38-41);
- An instantiated mobile agent resident on the first network node and transferable from the first node to the second network node (column 1, lines 16-21, column 3, lines 15-17, column 4, lines 15-25, column 5, lines 20-23).

Yama does not explicitly disclose:

- The instantiated mobile agent comprising application layer gateway functionality to provide a service to at least one client coupled to the second network node.

However, the use and advantages for an agent providing application layer gateway functionality to at least one client is well known to one skilled in the relevant art at the time the invention was made as evidenced by the teachings of Li (column 1, lines 35-39, column 2, lines 20-32, column 5, lines 39-41, 49-56, Abstract).

Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to implement or incorporate an agent providing application layer gateway functionality for at least one client in Yama's method in order to filter out material received at the client that may be in violation of security policy.

As per claim 24, Yama discloses:

- The second proactive environment is configured to determine whether the instantiated mobile agent has permission to execute in the second proactive

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environment (column 3, lines 29-37, column 4, lines 26-29, 55-57, column 7, lines 6-15).

As per claim 25, Yama discloses:

- The instantiated mobile agent includes an access control list that determines which services of the second environment the agent may access (column 4, lines 63-67, column 14, lines 55-67).

3. Claims 2, 11, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamamoto et al. (hereinafter "Yama", 6,282,563 B1) in view of Li et al. (hereinafter "Li", 6,119,165) and in further view of Bhide et al. (hereinafter "Bhide", 5,852,717).

Yama, in view of Li, does not explicitly disclose the agent acting as a web cache. However, the use and advantages for an agent acting as a web cache is well known to one skilled in the relevant art at the time the invention was made as evidenced by the teachings of Bhide (column 2, lines 2-7, Abstract).

Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to implement or incorporate an agent acting as a web cache in Yama's method in order to reduce latency by saving round-trip times between computer network components and increase the performance of client/server communication by responding more quickly to requests.

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4. Claims 3, 12, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamamoto et al. (hereinafter "Yama", 6,282,563 B1) in view of Li et al. (hereinafter "Li", 6,119,165) and in further view of Jones.

Yama, in view of Li, does not explicitly disclose the agent acting as a media transcoder. However, the use and advantages for an agent acting as a media transcoder is well known to one skilled in the relevant art at the time the invention was made as evidenced by the teachings of Jones (column 1, lines 18-19, column 8, lines 45-46, column 9, lines 20-23, 29-31, 42-50, 58-60).

Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to implement or incorporate an agent acting as a media transcoder in Yama's method in order for messages having multimedia programs to be converted and sent to the recipient of the message.

5. Claims 6, 8, 14, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamamoto et al. (hereinafter "Yama", 6,282,563 B1) in view of Li et al. (hereinafter "Li", 6,119,165) and in further view of Turek et al. (hereinafter "Turek", 6,460,070).

As per claims 6 and 14, Yama, in view of Li, does not explicitly disclose the agent automatically moving to a second target device and acting as an application layer gateway. However, in an analogous art, Turek discloses an agent deployed into the

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network to determine the cause and location of an event. The agent may arrive at a given node, but that node may not be the originator of the event. The agent then identifies a subset of nodes from the information received from the initial node and proceeds to those various nodes in search for the cause and location of the event (column 2, lines 47-50, 55-62, column 5, lines 46-53, 57-59).

Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to implement or incorporate the agent automatically moving to a second target device and acting as an application layer gateway in Yama's method in order to enhance the efficiency of the network by correcting the fault or event at the originating node.

As per claim 8, Yama, in view of Li, does not explicitly disclose the agent automatically uninstalling itself. However, in an analogous art, Turek discloses an agent deployed (installed) to a node and receiving information about an event, but moving (uninstalling) from that node, because the node did not originate an event, to another node that may be the originator (column 2, lines 47-50, 55-62, column 5, lines 46-53, 57-59).

Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to implement or incorporate the agent automatically uninstalling itself in Yama's method because this would enable the agent to automatically diagnose and correct network problems without the need for a system administrator to manually correct the fault.

As per claim 16, Yama, in view of Li, does not explicitly disclose the agent automatically uninstalling itself. However, in an analogous art, Turek discloses an agent deployed (installed) to a node and receiving information about an event, but moving (uninstalling) from that node, because the node did not originate an event, to another node that may be the originator (column 2, lines 47-50, 55-62, column 5, lines 46-53, 57-59).

Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to implement or incorporate the agent automatically uninstalling itself in Yama's method because this would enable the agent to automatically diagnose and correct network problems without the need for a system administrator to manually correct the fault.

Response to Arguments

6. Applicant's arguments with respect to claims 1, 9, 17, and 21 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US Patent No. 6,282,582

US Patent No. 5,825,759

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US Patent No. 6,473,761

US Patent No. 6,466,963

US Patent No. 5,903,732

US Patent No. 6,496,871


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Barbara N Burgess whose telephone number is (703) 305-3366. The examiner can normally be reached on M-F (8:00am-4:00pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Ettinene can be reached on (703) 308-7562. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 746-7239 for regular communications and (703) 746-7240 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Barbara N Burgess
Examiner
Art Unit 2157

August 11, 2003


SALEH NAJJAR
PRIMARY EXAMINER